

Course Syllabus

Title of the course	Introduction to the Theory of Finance		
Title of the Academic Programme	Economics		
Type of the course	Mandatory		
Prerequisites	No		
ECTS workload	5		
Total indicative study hours	Directed Study	Self-directed study	Total
	36	78	114
Course Overview	<p>The basic objective of this foundation course in finance is to summarize the fundamental theoretical aspects of finance relevant to the future study of finance and application within the scope of your master's degree. Essentially the course is an introduction to the theory and practice theory of modern financial economics and financial management, with a focus on capital markets and investments, and quantitative finance. It will help you revise the basic fundamentals – the most important concepts and analytical tools used in financial decision making, the important role of financial markets in finance, the basic principles of valuation, investing capital in investment opportunities to create value, the meaning and management of risk, and how organizations should raise and invest capital.</p>		
Intended Learning Outcomes (ILO)	<p>The general objective of the course is the creation and development students' competences in Finance Theory. It is aimed at the creation of competencies in the following fields:</p> <ul style="list-style-type: none"> - To know: Patterns of functioning and development trends of the national and global financial system: fiscal, budgetary system, public finance, financial market; Main results of the latest research in the field of finance theory; Differences between the major segments of the financial markets; Efficient market hypothesis; Types of financial intermediaries and their functions; Principles that determine the efficiency of financial operations. - To be able to: Identify key issues of information efficiency of financial markets; Highlight the features of the functioning of financial markets in economies in transition are not clearly fixed the rights of private property; Understand the essence of the changes taking place in the financial markets; Assess the factors affecting the stability of emerging economies; Evaluate the causes of financial crises in developing countries. - To acquire skills in: Possession of the procedure and methodology of scientific research in the professional field; Skills of independent research work; Analysis of the specific situation on the financial markets, budgetary, fiscal system, public finance. 		
Teaching and Learning Methods	<p>The course consists of lectures (24 hours) and seminars (12hours). The seminars involve student presentations (individually or in small groups) of contemporary research on financial literacy, financial planning, welfare management, financial management published in leading economics and finance journals. For each topic, a list of suggested articles is provided by the instructor.</p>		

Content and Structure of the Course					
№	Topic / Course Chapter	Total	Directed Study		Self-directed Study
			Lectures	Tutorials	
1	Introduction and history of the financial school	2	2		
2	The financial system, financial markets, the modern theory of finance	10	2		8
3	Financial mathematics and bases of financial calculations	10	2	2	8
4	Hypothesis of an effective market and operations in an imperfect market	12	2		8
5	Financial planning	19	2	2	8
6	Investments and performance evaluations	12	2		8
7	Fundamentals of Corporate Finance	10	2	4	8
8	Capital Structure	14	4		8
9	Financial assets and their valuation	12	2		8
10	Financial strategy	12	2	2	8
11	International Finance and Monetary Policy	12	2	2	6
Total study hours		114	24	12	78
Indicative Assessment Methods and Strategy		<p>The grade (G) is calculated as follows: $G = 0,5 \cdot (0,5 \cdot G_{hw} + 0,2 \cdot G_{sa} + 0,3 G_t) + 0,5 \cdot G_{EX}$, where G_{hw} – grade for homework projects and work on practice lessons G_{sa} – grade for students’ activities at class G_t - grade for written assignment G_{EX} – grade for the final examination The final exam consists of questions for each topic of the course and lasts 80 minutes. The maximal grade for the exam is 100 points. The in-class participation covered the attendance and in-class activity. The maximal grade for the in-class participation is 20 points.</p>			

	The home assignments can be completed both individually and in groups (up to 5 participants). The maximal grade for an assignment is 100 points.		
Readings / Indicative Learning Resources	<p>Financial Economics (2nd Edition) /Zvi Bodie, Robert C Merton, David Cleeton - Pearson Learning Solutions; 2 edition, 2012. - 512 c.</p> <p><i>Additional readings</i></p> <p>The Economics of Money, Banking and Financial Markets / Frederic S. Mishkin – Pearson Education; Global ed of 10th revised ed edition. 2012. – 520 c.</p> <p>Richard J. Teweles, Edward S. Bradley. / The Stock Market. - Wiley Investment- 7 ed. 1999. 512 p</p> <p>Sharpe W., Alexander G., Bailey J. / Investments.- Prentice Hall, 1998. — 962 p.</p> <p>F. Fabozzi, F. Modigliani, M. Ferry “Foundations of Financial Markets and Institutions” Prentice Hall 1998</p> <p>D. Blake “Financial Market Analysis” Wiley 2003</p> <p>A. Shleifer “Inefficient Markets. An Introduction to Behavioral Finance” Oxford University Press 2000</p>		
Indicative Self- Study Strategies	Type	+/-	Hours
	Reading for seminars / tutorials (lecture materials, mandatory and optional resources)	+	60
	Assignments for seminars / tutorials / labs	+	40
	E-learning / distance learning (MOOC / LMS)		
	Fieldwork		
	Project work	+	30
	Other (please specify)		
	Preparation for the exam	+	12
Academic Support for the Course	Academic support for the course is provided via LMS, where students can find: guidelines and recommendations for doing the course; guidelines and recommendations for self-study; samples of assessment materials		
Facilities, Equipment and Software	SPSS		
Course Instructor	Vasilisa Makarova		

Intended Learning Outcomes (ILO) Delivering

Programme ILO(s)	Course ILO(s)	Teaching and Learning Methods for delivering ILO(s)	Indicative Assessment Methods of Delivered ILO(s)
LO1 Is able to learn, acquire new knowledge, skills, including in a field different from professional	Understand time value of money, patterns of financial decision making in increasing complexity of financial environment. To know mathematics of finance theory and methodology of financial decisions.	Lectures Practice Reading materials	Test Presentations Exam
LO2 Is able to critically evaluate and re-evaluate the accumulated experience (own and foreign), to reflect professional and social activities	Understand specific questions the theory addresses. Understand that finance issues are not isolated from each other. To know how and when finance theory can be applied to achieve a desired goal.	Group presentations Discussions	In-class discussion Presentation
LO3 Preparation of initial data for the calculation of economic and socio-economic indicators characterizing the results of the researched subject.	To understand which theory is applicable in these circumstances and what are its practical limits. To be familiar with empirical evidence which support or reject hypothesis and predictions of a theory. Be able to critically evaluate current research in this field	Analysis of publications in leading academic journals In-class discussions	Presentation Discussion

Course Content

Topic 1. Introduction and history of the financial school

Periods of financial science. The essence of classical and neoclassical theory of finance; The role of individual scientists in the development of financial science; The neoclassical theory of finance; Features of development of financial science in Russia; Russian scientists contribution to the development of financial science

Topic 2. The financial system, financial markets, the modern theory of finance

The functions of the financial markets. Structure and classification of financial markets (according to the type of financial instruments, according to the method of placement of financial instruments by maturity instruments, according to the method of organization of transactions). The international financial market, eurobonds, euro. International securities market. Financial intermediaries. The role of financial intermediation to ensure the effectiveness of economic development. Types of financial intermediaries. Regulation of the financial system.

Topic 3. Financial mathematics and bases of financial calculations

Simple and compound interest. Effective rate. Banking and mathematical dis-assignment .. Applications of simple and compound interest. Models of accounts with variable capital. Commercial and actuarial rules for a binary model. Consolidated payments. Inflation accounting. Accounting for taxation of interest income Refinancing rate The notion of financial flow. Timing chart. Calculation of the value of the financial stream, which has the character of rent. Credit calculations. Repayment of debt by one payment at the end of the term. Repayment of debt in installments by differentiated and annuity payments. Long-term credit schemes. Calculation of the effective rate. Short-term credit schemes. Calculation of the effective rate

Topic 4. Hypothesis of an effective market and operations in an imperfect market

The theory of rational expectations, formal statements and practice.

Transaction costs. Liquidity. Introduction to taxation. Fundamentals of federal taxes. Early taxation and tax expenses. Average and marginal tax rates. Dividends and taxes on capital gains. Non-taxable bonds and a marginal investor. Taxes in the NPV. Tax regulation. Inflation. Determination of the inflation rate. Real and nominal interest rates. Interest rates and inflation expectations.

Topic 5. Financial planning

Necessity of financial planning. Objects and subjects of financial planning. Contents and purpose of financial planning. Financial plan, its meaning and essence in the process of financial planning. Types of financial plans. Tasks of financial planning. The main

objectives of financial planning. Stages of financial planning. Methods of financial planning.

Topic 6. Investments and performance evaluations

Applications and recommendations for budgeting (NPV) "Economics of Project Interaction". Final project selection rule Project pairs and external factors Comparison of projects with different indicators. Expected, typical and most likely scenarios. Future unforeseen circumstances and real options. option evaluation in a risk-neutral environment. Decision trees: one set of parameters Decision trees: one set of parameters The index of profitability. Internal rate of return (IRR) Payback period problem.

Topic 7. Fundamentals of Corporate Finance

The basic concept of management decisions, methodical provision of financial management. Structure and cost of capital. The concept of payment for items the company's capital. The concept of the company's working capital. Internal and external sources of funding. Analysis and evaluation of the financial condition of the company. Models achievable economic growth.

Topic 8. Capital Structure

Capital structure in an ideal market Maximizing the value of shares or the value of a firm? Modigliani and Miller (M & M), The informal way. Modigliani and Miller (M & M), "Formal way in perfect markets." Dividends. Weighted average cost of capital (WACC) in the ideal world of M & M. A numerical example in a risky world in which more risky means should offer higher ones. Expected Rate of Return The WACC formula (without taxes). The main mistake: if all securities are more risky, is the firm more risky? Influence of price-earnings ratios (again). Using the cost of capital CAPM and WACC in the NPV formula

Topic 9. Valuation of financial assets

Valuation of shares, bonds. Hedging, forward and futures contracts. Options. Swaps. Pricing of derivative financial instruments.

Topic 10. Financial strategy

Goals and logic. Detailed horizon vs. time gap. Methods: Direct extrapolation of historical cash flows; with detailed modeling of financial indicators. Policies and calculations from Pro Forma components. The cost of capital. The cost of capital, taking into account the growth rate of cash flows. Alternative assumptions and sensitivity analysis.

Topic 11. International Finance and Monetary Policy

The foreign exchange market. Exchange rates in the long and short term. Currency fluctuations. Purchasing power parity. The international financial system. The role of the international financial market in monetary policy. The regulation of the exchange rate as a goal and a method of monetary policy.

Assessment Methods and Criteria

Assessment Methods

Types of Assessment	Forms of Assessment	Modules			
		1	2	3	4
Formative Assessment	Test	*			
	Essay	*			
	Report/Presentation				
	Project	*			
	In-class Participation	*			
	Other (write appropriate control forms for the course)				
Interim Assessment (if required)	Assignment (e.g. written assignment)	*			
Summative Assessment	Exam	*			

Assessment Criteria

In-class Participation

Grades	Assessment Criteria
«Excellent» (8-10)	A critical analysis which demonstrates original thinking and shows strong evidence of preparatory research and broad background knowledge.
«Good» (6-7)	Shows strong evidence of preparatory research and broad background knowledge. Excellent oral expression.
«Satisfactory» (4-5)	Satisfactory overall, showing a fair knowledge of the topic, a reasonable standard of expression. Some hesitation in answering follow-up questions and/or gives incomplete or partly irrelevant answers.
«Fail» (0-2)	Limited evidence of relevant knowledge and an attempt to address the topic. Unable to offer relevant information or opinion in answer to follow-up questions.

Project Work

Grades	Assessment Criteria
«Excellent» (8-10)	A well-structured, analytical presentation of project work. Shows strong evidence and broad background knowledge. In a group presentation all members contribute equally and each contribution builds on the previous one clearly; Answers to follow-up questions reveal a good range and depth of knowledge beyond that covered in the presentation and show confidence in discussion.
«Good» (6-7)	Clearly organized analysis, showing evidence of a good overall knowledge of the topic. The presenter of the project work highlights key points and responds to follow up questions appropriately. In group presentations there is evidence that the group has met to discuss the topic and is presenting the results of that discussion, in an order previously agreed.
«Satisfactory» (4-5)	Takes a very basic approach to the topic, using broadly appropriate material but lacking focus. The presentation of project work is largely unstructured, and some points are irrelevant to the topic. Knowledge of the topic is limited and there may be evidence of basic misunderstanding. In a group presentation, most of the work is done by one or two students and the individual contributions do not add up.
«Fail» (0-2)	Fails to demonstrate any appropriate knowledge.

Written Assignments (Essay, Test/Quiz, Written Exam, etc.)

Grades	Assessment Criteria
«Excellent» (8-10)	Has a clear argument, which addresses the topic and responds effectively to all aspects of the task. Fully satisfies all the requirements of the task; rare minor errors occur;
«Good» (6-7)	Responds to most aspects of the topic with a clear, explicit argument. Covers the requirements of the task; may produce occasional errors.
«Satisfactory» (4-5)	Generally addresses the task; the format may be inappropriate in places; display little evidence of (depending on the assignment): independent thought and critical judgement include a partial superficial coverage of the key issues, lack critical analysis, may make frequent errors.
«Fail» (0-2)	Fails to demonstrate any appropriate knowledge.

Recommendations for students about organization of self-study

Self-study is organized in order to:

- Systemize theoretical knowledge received at lectures;
- Extending theoretical knowledge;
- Learn how to use legal, regulatory, referential information and professional literature;
- Development of cognitive and soft skills: creativity and self-sufficiency;
- Enhancing critical thinking and personal development skills;
- Development of research skills;
- Obtaining skills of efficient independent professional activities.

Self-study, which is not included into a course syllabus, but aimed at extending knowledge about the subject, is up to the student's own initiative. A teacher recommends relevant resources for self-study, defines relevant methods for self-study and demonstrates students' past experiences. Tasks for self-study and its content can vary depending on individual characteristics of a student. Self-study can be arranged individually or in groups both offline and online depending on the objectives, topics and difficulty degree. Assessment of self-study is made in the framework of teaching load for seminars or tests.

In order to show the outcomes of self-study it is recommended:

- Make a plan for 3-5 presentation which will include topic, how the self-study was organized, main conclusions and suggestions and its rationale and importance.
- Supply the presentation with illustrations. It should be defined by an actual task of the teacher.

Recommendations for essay

An essay is a written self-study on a topic offered by the teacher or by the student him/herself approved by teacher. The topic for essay includes development of skills for critical thinking and written argumentation of ideas. An essay should include clear statement of a research problem; include an analysis of the problem by using concepts and analytical tools within the subject that generalize the point of view of the author.

Essay structure:

1. *Introduction and formulation of a research question.*
2. *Body of the essay* and theoretical foundation of selected problem and argumentation of a research question.
3. *Conclusion* and argumentative summary about the research question and possibilities for further use or development.

Special conditions for organization of learning process for students with special needs

The following types of comprehension of learning information (including e-learning and distance learning) can be offered to students with disabilities (by their written request) in accordance with their individual psychophysical characteristics:

1. *for persons with vision disorders:* a printed text in enlarged font; an electronic document; audios (transferring of learning materials into the audio); an individual advising with an assistance of a sign language interpreter; individual assignments and advising.
2. *for persons with hearing disorders:* a printed text; an electronic document; video materials with subtitles; an individual advising with an assistance of a sign language interpreter; individual assignments and advising.
3. *for persons with muscle-skeleton disorders:* a printed text; an electronic document; audios; individual assignments and advising.